

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Jeff EDER

Serial No.: 10/717,026

Filed: November 19, 2003

For: AN ENTITY CENTRIC COMPUTER SYSTEM

Group Art Unit: 2121

Examiner: Michael Holmes

Brief on Appeal

Honorable Commissioner of Patents and Trademarks

Washington, D.C. 20321

Sir or Madam:

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Real party in interest

Asset Reliance, Inc. (dba Asset Trust, Inc.)

Related appeals

An appeal for U.S. Patent Application 11/262,146 filed December 23, 2002 may be affected by or have a bearing on this appeal.

Status of Claims

Claims 28 – 70 are pending and are the subject of this appeal. No other claims are pending. Claims 1 – 27 were withdrawn before the first office action.

Status of Amendments

An Amendment/Reply was submitted on September 21, 2007. An amendment sent on November 16, 2007 in an effort to avoid issues raised by Appeals 2006-3104 and 2007-1341 was not entered by the Examiner.

Summary of Claimed Subject Matter

One embodiment of an entity centric computer system according to the present invention is best depicted in Figure 1 – 17 of the specification. Figure 1 gives an overview of the major processing steps which include obtaining data for use in processing, developing one or more entity contexts for a defined entity before storing them in a context base and completing useful tasks that are appropriate for the identified context(s).

Independent Claim 28 - A first embodiment of the entity centric computer system is exemplified by independent claim 28 where a machine combines a plurality of entity related systems and databases with: the means for acquiring and preparing the data from the systems and databases for use in processing, the means for transforming at least a portion of said data into a complete entity context, the means for storing each complete entity context and the means for distributing the complete entity context. As detailed in pages 12 – 21 of the specification, a complete entity context identifies each of the one or more aspects of a context that have a tangible impact on the behavior of each of the function measures for an entity and it includes different aspects of context selected from the group consisting element context, resource context, factor context, reference context, measure context, relationship context, transaction context, lexical context, temporal context and combinations thereof. As defined in the specification, a complete entity context comprises a context frame that includes all entity functions. For independent claim 28, data are acquired and prepared for use in processing in as described in FIG. 6A reference numbers 201 – 209, FIG. 6B reference numbers 211, 212, 214, 216, 218, 220, 222, 224 and 226. FIG. 6C reference numbers 242, 244, 246, 248, 250, 252 and 254 and pages 47 – 68 of the specification. A complete entity context is then developed and stored as described in FIG. 7A reference numbers 301 – 305, 307 – 310 and 312 – 315, FIG. 7B reference numbers 322, 325, 304, 305, 209, 310 and 312-315, FIG. 7C reference numbers 332, 335, 304, 305, 209, 310 and 312-315, FIG. 7D reference numbers 303 – 305, 307 – 308 and 341 – 349, FIG. 7E reference numbers 304, 305, 325, 342, 344 – 348 and 356, FIG. 7F reference numbers 305, 335, 342 – 348 and 361. FIG. 7G reference numbers 370 – 374, 376 – 377, 379 – 380 and 382 and pages 69 - 107. The complete entity context is then distributed as described in FIG. 8A reference numbers 402, 403, 410, 413, 414 and 415. FIG. 10 and line 1, page 108 through line 10, page 113 of the specification.

Dependent claims

The limitations and activities associated with dependent claim 29 are described in line 18, page 24 through line 18, page 25 and line 20, page 32 through line 26, page 36 of the specification. The activities comprise completing one or more entity related actions in an optimal manner, identifying a valid context space for entity analyses, underwriting one or more entity related securities, displaying a plurality of entity related information, forecasting an entity behavior, forecasting an entity sustainability and combinations thereof.

The limitations associated with dependent claim 30 are described in a variety of places including: Table 1, page 3; Table 2, page 4 and Table 3, page 5 of the specification, and reference numbers 10, 20 and 30 in FIG. 2A, FIG. 2B and FIG. 3.

The limitations associated with dependent claim 31 are described in a variety of places

including: line, 10 page 6 through line 16, page 6 of the specification and FIG. 2A, FIG. 2B and FIG. 2C.

The limitations associated with dependent claim 32 are described in a variety of places including: Table 1, page 3; Table 2, page 4 and Table 3, page 5 of the specification.

The limitations and activities associated with dependent claim 33 are described in a variety of places including: line 10, page 8 through line 18, page 8 of the specification and reference number 204, FIG. 6A. The acts comprise preparing data for use in processing by converting and storing entity related data from a plurality of systems in accordance with a common schema or ontology.

The limitations associated with dependent claim 34 are described in a variety of places including: Table 4, page 9; Table 5, page 9, Table 6, page 9, Table 7, page 10 and Table 8, page 10 of the specification.

The limitations associated with dependent claim 35 are described in a variety of places including: line 20, page 49 through line 26, page 49 of the specification.

The limitations associated with dependent claim 36 are described in a variety of places including: line 20, page 44 through line 26, page 44 of the specification.

Independent Claim 37 - A second embodiment of the entity centric computer system is exemplified by independent claim 37 where an article of manufacture causes at least one computer to aggregate data from entity related systems and then transforms at least a portion of said data into a complete entity context, before using the complete entity context to complete a variety of useful tasks. As defined in the specification, a complete entity context comprises a context frame that includes all entity functions. For independent claim 35, data are aggregated and prepared for use in processing in as described in FIG. 6A reference numbers 201 – 209, FIG. 6B reference numbers 211, 212, 214, 216, 218, 220, 222, 224 and 226. FIG. 6C reference numbers 242, 244, 246, 248, 250, 252 and 254 and pages 47 – 68 of the specification. A complete entity context is then developed and stored as described in FIG. 7A reference numbers 301 – 305, 307 – 310 and 312 – 315, FIG. 7B reference numbers 322, 325, 304, 305, 209, 310 and 312-315, FIG. 7C reference numbers 332, 335, 304, 305, 209, 310 and 312-315, FIG. 7D reference numbers 303 – 305, 307 – 308 and 341 – 349, FIG. 7E reference numbers 304, 305, 325, 342, 344 – 348 and 356, FIG. 7F reference numbers 305, 335, 342 – 348 and 361. FIG. 7G reference numbers 370 – 374, 376 – 377, 379 – 380 and 382 and pages 69 - 107. The complete entity context is then distributed as described in FIG. 8A reference numbers 402, 403, 410, 413, 414 and 415, FIG. 10 and line 1, page 108 through line 10, page 113 of the specification. The distributed complete context is then used to: complete one or more entity related actions in an optimal manner, identify a valid context space for entity analyses, underwrite one or more entity related securities, display a plurality of entity related information, forecast an entity behavior, forecast an entity sustainability and combinations thereof as described line 5, page 26 through line 5, page 37 of the specification and as shown in FIG. 8A.

Dependent claims

The limitations and activities associated with dependent claim 38 are described in line 1, page 69 through line 18, page 107 of the specification and FIG. 7A reference numbers 301 – 305, 307 – 310 and 312 – 315, FIG. 7B reference numbers 322, 325, 304, 305, 209, 310 and 312-315, FIG. 7C reference numbers 332, 335, 304, 305, 209, 310 and 312-315, FIG. 7D reference numbers 303 – 305, 307 – 308 and 341 – 349, FIG. 7E reference numbers 304, 305, 325, 342, 344 – 348 and 356, FIG. 7F reference numbers 305, 335, 342 – 348 and 361. FIG. 7G reference numbers 370 – 374, 376 – 377, 379 – 380 and 382. The activities comprise developing a model of one or more aspects of context by automated learning from the data.

The limitations associated with dependent claim 39 are described in a variety of places including: line 20, page 14 through line 28, page 15 of the specification.

The limitations associated with dependent claim 40 are described in a variety of places including: line 10 page 6 through line 16, page 6 of the specification and FIG. 2A, FIG. 2B and FIG. 2C.

The limitations associated with dependent claim 41 are described in a variety of places including: Table 1, page 3; Table 2, page 4 and Table 3, page 5 of the specification.

The limitations associated with dependent claim 42 are described in a variety of places including: line 10, page 75 through line 15, page 75 of the specification.

The limitations associated with dependent claim 43 are described in a variety of places including: line 6, page 12 through line 3, page 14 of the specification.

The limitations and activities associated with dependent claim 44 are described in line 1, page 69 through line 18, page 107 of the specification and FIG. 7A reference numbers 301 – 305, 307 – 310 and 312 – 315, FIG. 7B reference numbers 322, 325, 304, 305, 209, 310 and 312-315, FIG. 7C reference numbers 332, 335, 304, 305, 209, 310 and 312-315, FIG. 7D reference numbers 303 – 305, 307 – 308 and 341 – 349, FIG. 7E reference numbers 304, 305, 325, 342, 344 – 348 and 356, FIG. 7F reference numbers 305, 335, 342 – 348 and 361. FIG. 7G reference numbers 370 – 374, 376 – 377, 379 – 380 and 382. The activities comprise developing a complete context by automated learning from the data.

The limitations associated with dependent claim 45 are described in a variety of places including: line 1, page 108 through line 10, page 109 of the specification and reference numbers 402, 403 and 410 of FIG. 8A.

Independent Claim 46 - A third embodiment of the entity centric computer system is exemplified in independent claim 46 where a process aggregates data from entity related systems and then transforms at least a portion of said data into a plurality of entity context frames before completing a search for a specific context frame (or entity context). The description of the entity context contained in claim 46 corresponds directly to the context frame definition in the specification. For independent claim 46, data are aggregated and prepared for use in processing in as described in FIG. 6A reference numbers 201 – 209, FIG. 6B reference numbers 211, 212, 214, 216, 218, 220,

222, 224 and 226. FIG. 6C reference numbers 242, 244, 246, 248, 250, 252 and 254 and pages 47 – 68 of the specification. A complete entity context is then developed and stored as described in FIG. 7A reference numbers 301 – 305, 307 – 310 and 312 – 315, FIG. 7B reference numbers 322, 325, 304, 305, 209, 310 and 312-315, FIG. 7C reference numbers 332, 335, 304, 305, 209, 310 and 312-315, FIG. 7D reference numbers 303 – 305, 307 – 308 and 341 – 349, FIG. 7E reference numbers 304, 305, 325, 342, 344 – 348 and 356, FIG. 7F reference numbers 305, 335, 342 – 348 and 361. FIG. 7G reference numbers 370 – 374, 376 – 377, 379 – 380 and 382 and pages 69 – 107. The complete entity context is then used to generate a plurality of context frames as described in FIG. 8A reference numbers 402, 403, 410, 413, 414 and 415, FIG. 10 and line 1, page 108 through line 10, page 113 of the specification. The context frames (or entity context) are processed by a Complete Context™ Search Engine (609). The Complete Context™ Search Engine is described in line 27 page 35 through line 3 pages 36 of the specification and application 60/432,283 which is incorporated by reference. The Complete Context™ Search Engine is part of the Complete Context™ Suite (625).

Dependent claims

The limitations and activities associated with dependent claim 47 are described in a variety of places including line 7, page 32 through line 18, page 32 of the specification. The activities comprise completing a transaction in an automated fashion.

The limitations associated with dependent claim 48 are described in a variety of places including: line 24, page 21 through line 30, page 21 of the specification.

The limitations and activities associated with dependent claim 49 are described in line 1, page 69 through line 18, page 107 of the specification and FIG. 7A reference numbers 301 – 305, 307 – 310 and 312 – 315, FIG. 7B reference numbers 322, 325, 304, 305, 209, 310 and 312-315, FIG. 7C reference numbers 332, 335, 304, 305, 209, 310 and 312-315, FIG. 7D reference numbers 303 – 305, 307 – 308 and 341 – 349, FIG. 7E reference numbers 304, 305, 325, 342, 344 – 348 and 356, FIG. 7F reference numbers 305, 335, 342 – 348 and 361. FIG. 7G reference numbers 370 – 374, 376 – 377, 379 – 380 and 382. The activities comprise developing a plurality of layers for a complete context by automated learning from the data.

The limitations associated with dependent claim 50 are described in a variety of places including: line 28, page 110 through line 20, page 111 of the specification.

Independent Claim 51 - A fourth embodiment of the entity centric computer system is exemplified in independent claim 51 where a computer system (aka machine) aggregates data from entity related systems and then transforms at least a portion of said data into a plurality of entity context frames (or entity context) that are then distributed. The description of the entity context contained in the claim 51 corresponds directly to the context frame definition in the specification. For independent claim 51, data are aggregated and prepared for use in processing in as described in FIG. 6A reference numbers 201 – 209, FIG. 6B reference numbers 211, 212, 214, 216, 218, 220, 222, 224 and 226. FIG. 6C reference numbers 242, 244, 246, 248, 250, 252 and 254 and pages 47 – 68 of the specification. A complete entity context is then developed and stored as described in

FIG. 7A reference numbers 301 – 305, 307 – 310 and 312 – 315, FIG. 7B reference numbers 322, 325, 304, 305, 209, 310 and 312-315, FIG. 7C reference numbers 332, 335, 304, 305, 209, 310 and 312-315, FIG. 7D reference numbers 303 – 305, 307 – 308 and 341 – 349, FIG. 7E reference numbers 304, 305, 325, 342, 344 – 348 and 356, FIG. 7F reference numbers 305, 335, 342 – 348 and 361, FIG. 7G reference numbers 370 – 374, 376 – 377, 379 – 380 and 382 and pages 69 - 107. The complete entity context is then used to generate the entity context that is distributed as described in FIG. 8A reference numbers 402, 403, 410, 413, 414 and 415, FIG. 10 and line 1, page 108 through line 10, page 113 of the specification.

Dependent claims

The limitations and activities associated with dependent claim 52 are described in line 10, page 110 through line 10, page 113 of the specification, FIG. 8A reference numbers 415, 420 and FIG. 10 reference numbers 716 and 728. The activities comprise context distribution via device synchronization, device synchronization and replication, packet distribution and/or a natural language interface.

The limitations and activities associated with dependent claim 53 are described in line 10, page 110 through line 10, page 113 of the specification, FIG. 8A reference numbers 415 and 420. The activities comprise context distribution via operating system layers, middleware layers or web service capabilities.

Independent Claim 54 - A fifth embodiment of the entity centric computer system is exemplified in independent claim 54 where a process aggregates data from entity related systems and then transforms at least a portion of said data into a plurality of entity context frames before completing a search for a specific context frame (or entity context). The description of the entity context contained in claim 54 corresponds directly to the context frame definition in the specification. For independent claim 54, data are aggregated and prepared for use in processing in as described in FIG. 6A reference numbers 201 – 209, FIG. 6B reference numbers 211, 212, 214, 216, 218, 220, 222, 224 and 226, FIG. 6C reference numbers 242, 244, 246, 248, 250, 252 and 254 and pages 47 – 68 of the specification. A complete entity context is then developed and stored as described in FIG. 7A reference numbers 301 – 305, 307 – 310 and 312 – 315, FIG. 7B reference numbers 322, 325, 304, 305, 209, 310 and 312-315, FIG. 7C reference numbers 332, 335, 304, 305, 209, 310 and 312-315, FIG. 7D reference numbers 303 – 305, 307 – 308 and 341 – 349, FIG. 7E reference numbers 304, 305, 325, 342, 344 – 348 and 356, FIG. 7F reference numbers 305, 335, 342 – 348 and 361, FIG. 7G reference numbers 370 – 374, 376 – 377, 379 – 380 and 382 and pages 69 - 107. The complete entity context is then used to generate a plurality of context frames as described in FIG. 8A reference numbers 402, 403, 410, 413, 414 and 415, FIG. 10 and line 1, page 108 through line 10, page 113 of the specification. The context frames (or entity context) are processed by a Complete Context™ Search Engine (609). The Complete Context™ Search Engine is described in line 27 page 35 through line 3 pages 36 of the specification and application 60/432,283 which is incorporated by reference. The Complete Context™ Search Engine is part of the Complete Context™ Suite (625).

Dependent claims

The limitations associated with dependent claim 55 are described in a variety of places including: line 5, page 12 through line 3, page 14 of the specification.

The limitations associated with dependent claim 56 are described in a variety of places including: line 21, page 23 through line 23, page 23 of the specification.

The limitations associated with dependent claim 57 are described in a variety of places including: line 15, page 11 of the specification.

The limitations associated with dependent claim 58 are described in a variety of places including: line 20, page 14 through line 28, page 15 of the specification.

The limitations and activities associated with dependent claim 59 are described in line 1, page 69 through line 18, page 107 of the specification and FIG. 7A reference numbers 301 – 305, 307 – 310 and 312 – 315, FIG. 7B reference numbers 322, 325, 304, 305, 209, 310 and 312-315, FIG. 7C reference numbers 332, 335, 304, 305, 209, 310 and 312-315, FIG. 7D reference numbers 303 – 305, 307 – 308 and 341 – 349, FIG. 7E reference numbers 304, 305, 325, 342, 344 – 348 and 356, FIG. 7F reference numbers 305, 335, 342 – 348 and 361. FIG. 7G reference numbers 370 – 374, 376 – 377, 379 – 380 and 382. The activities comprise developing an entity context by automated learning from the data.

Independent claim 60 - A sixth embodiment of the entity centric computer system is exemplified in independent claim 60 where a where an article of manufacture aggregates data from entity related systems and then transforms at least a portion of said data into a plurality of entity context frames before completing a search for a specific context frame (or entity context). The description of the entity context contained in the claim 60 corresponds directly to the context frame definition in the specification. For independent claim 60, data are aggregated and prepared for use in processing in as described in FIG. 6A reference numbers 201 – 209, FIG. 6B reference numbers 211, 212, 214, 216, 218, 220, 222, 224 and 226. FIG. 6C reference numbers 242, 244, 246, 248, 250, 252 and 254 and pages 47 – 68 of the specification. A complete entity context is then developed and stored as described in FIG. 7A reference numbers 301 – 305, 307 – 310 and 312 – 315, FIG. 7B reference numbers 322, 325, 304, 305, 209, 310 and 312-315, FIG. 7C reference numbers 332, 335, 304, 305, 209, 310 and 312-315, FIG. 7D reference numbers 303 – 305, 307 – 308 and 341 – 349, FIG. 7E reference numbers 304, 305, 325, 342, 344 – 348 and 356, FIG. 7F reference numbers 305, 335, 342 – 348 and 361. FIG. 7G reference numbers 370 – 374, 376 – 377, 379 – 380 and 382 and pages 69 - 107. The complete entity context is then used to generate a plurality of context frames as described in FIG. 8A reference numbers 402, 403, 410, 413, 414 and 415, FIG. 10 and line 1, page 108 through line 10, page 113 of the specification. The context frames (or entity context) are processed by a Complete Context™ Search Engine (609). The Complete Context™ Search Engine is described in line 27 page 35 through line 3 pages 36 of the specification and application 60/432,283 which is incorporated by reference. The Complete Context™ Search Engine is part of the Complete Context™ Suite (625).

Dependent claims

The limitations associated with dependent claim 61 are described in a variety of places including: line 21, page 23 through line 23, page 23 of the specification.

The limitations associated with dependent claim 62 are described in a variety of places including: line 15, page 11 of the specification.

The limitations associated with dependent claim 63 are described in a variety of places including: Table 4, page 9; Table 5, page 9, Table 6, page 9, Table 7, page 10 and Table 8, page 10 of the specification.

The limitations and activities associated with dependent claim 64 are described in line 4, page 26 through line 14, page 26, line 1, page 69 through line 18, page 107 of the specification and FIG. 7A reference numbers 301 – 305, 307 – 310 and 312 – 315, FIG. 7B reference numbers 322, 325, 304, 305, 209, 310 and 312-315, FIG. 7C reference numbers 332, 335, 304, 305, 209, 310 and 312-315, FIG. 7D reference numbers 303 – 305, 307 – 308 and 341 – 349, FIG. 7E reference numbers 304, 305, 325, 342, 344 – 348 and 356, FIG. 7F reference numbers 305, 335, 342 – 348 and 361, FIG. 7G reference numbers 370 – 374, 376 – 377, 379 – 380 and 382. The activities comprise identifying one or more priorities by automated learning from the data.

The limitations associated with dependent claim 65 are described in a variety of places including: Table 1, page 3; Table 2, page 4 and Table 3, page 5 of the specification, and reference numbers 10, 20 and 30 in FIG. 2A, FIG. 2B and FIG. 3.

Independent claim 66 - A seventh embodiment of the entity centric computer system is exemplified in independent claim 66 where a where a computer system (machine) aggregates data from entity related systems and then transforms at least a portion of said data into a plurality of entity context frames before completing a search for a specific context frame (or entity context). The description of the entity context contained in the claim 46 corresponds directly to the context frame definition in the specification. For independent claim 46, data are aggregated and prepared for use in processing in as described in FIG. 6A reference numbers 201 – 209, FIG. 6B reference numbers 211, 212, 214, 216, 218, 220, 222, 224 and 226, FIG. 6C reference numbers 242, 244, 246, 248, 250, 252 and 254 and pages 47 – 68 of the specification. A complete entity context is then developed and stored as described in FIG. 7A reference numbers 301 – 305, 307 – 310 and 312 – 315, FIG. 7B reference numbers 322, 325, 304, 305, 209, 310 and 312-315, FIG. 7C reference numbers 332, 335, 304, 305, 209, 310 and 312-315, FIG. 7D reference numbers 303 – 305, 307 – 308 and 341 – 349, FIG. 7E reference numbers 304, 305, 325, 342, 344 – 348 and 356, FIG. 7F reference numbers 305, 335, 342 – 348 and 361, FIG. 7G reference numbers 370 – 374, 376 – 377, 379 – 380 and 382 and pages 69 - 107. The complete entity context is then used to generate a plurality of context frames as described in FIG. 8A reference numbers 402, 403, 410, 413, 414 and 415, FIG. 10 and line 1, page 108 through line 10, page 113 of the specification. The context frames (or entity context) are processed by a Complete Context™ Search Engine (609). The Complete Context™ Search Engine is described in line 27 page 35 through line 3 pages 36 of the specification and application 60/432,283 which is incorporated by reference. The Complete Context™ Search Engine is part of the Complete Context™ Suite (625).

Dependent claims

The limitations associated with dependent claim 67 are described in a variety of places including: line 20, page 14 through line 28, page 15 and line 21, page 23 through line 23, page 23 of the specification.

The limitations associated with dependent claim 68 are described in a variety of places including: line 15, page 21, through line 22, page 21 of cross referenced application 60/432,283.

The limitations associated with dependent claim 69 are described in a variety of places including: Table 4, page 9; Table 5, page 9, Table 6, page 9, Table 7, page 10 and Table 8, page 10 of the specification.

Independent claim 70 - An eighth embodiment of the entity centric computer system is exemplified in independent claim 70 where a process prepares data from a plurality of entity related systems for use in processing and then transforms at least a portion of said data into an entity knowledge, before using the knowledge to complete a variety of tasks that provide context specific electronic performance support. For independent claim 70, data are aggregated and prepared for use in processing in as described in FIG. 6A reference numbers 201 – 209, FIG. 6B reference numbers 211, 212, 214, 216, 218, 220, 222, 224 and 226, FIG. 6C reference numbers 242, 244, 246, 248, 250, 252 and 254 and pages 47 – 68 of the specification. Entity knowledge is then developed and stored as described in FIG. 7A reference numbers 301 – 305, 307 – 310 and 312 – 315, FIG. 7B reference numbers 322, 325, 304, 305, 209, 310 and 312-315, FIG. 7C reference numbers 332, 335, 304, 305, 209, 310 and 312-315, FIG. 7D reference numbers 303 – 305, 307 – 308 and 341 – 349, FIG. 7E reference numbers 304, 305, 325, 342, 344 – 348 and 356, FIG. 7F reference numbers 305, 335, 342 – 348 and 361. FIG. 7G reference numbers 370 – 374, 376 – 377, 379 – 380 and 382 and pages 69 - 107. The entity knowledge is then distributed as described in FIG. 8A reference numbers 402, 403, 410, 413, 414 and 415 and line 1, page 108 through line 25 of page 113 of the specification and optionally processed by a Complete Context™ Suite (625) of Applications as required to provide context specific electronic support.

Grounds of rejection to be reviewed on appeal

Issue 1 - Whether the inventions described in claim 28, claim 29, claim 30, claim 31, claim 32, claim 33, claim 34, claim 35 and/or claim 36 represent patentable subject matter under 35 USC 101?

Issue 2 - Whether the inventions described in claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44 and claim 45 represents patentable subject matter under 35 USC 101?

Issue 3 - Whether the inventions described in claim 46, claim 47, claim 48, claim 49 and/or claim 50 represent patentable subject matter under 35 USC 101?

Issue 4 - Whether the inventions described in claim 51, claim 52 and/or claim 53 represent patentable subject matter under 35 USC 101?

Issue 5 - Whether the inventions described in claim 54, claim 55, claim 56, claim 57, claim 58 and/or claim 59 represent patentable subject matter under 35 USC 101?

Issue 6 - Whether the inventions described in claim 60, claim 61, claim 62, claim 63, claim 64 and/or claim 65 represent patentable subject matter under 35 USC 101?

Issue 7 - Whether the inventions described in claim 66, claim 67, claim 68 and/or claim 69 represent patentable subject matter under 35 USC 101?

Issue 8 - Whether the invention described in claim 70 represents patentable subject matter under 35 USC 101?

The Argument

Grouping of Claims

For each ground of rejection which Appellant contests herein which applies to more than one claim, such additional claims, to the extent separately identified and argued below, do not stand and fall together.

Issue 1 - Whether the inventions described in claim 28, claim 29, claim 30, claim 31, claim 32, claim 33, claim 34, claim 35 and/or claim 36 represent patentable subject matter under 35 USC 101?

Claim 28, claim 29, claim 30, claim 31, claim 32, claim 33, claim 34, claim 35 and claim 36 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. More specifically the Examiner states that the "claims involves disjointed concepts and ideas based in the abstract, all of which fail to provide a practical application and is insufficient to establish a real world "tangible" result" and that nothing is specified in the claims that limits the claim to a particular application. These rejections are respectfully traversed in a number of ways. In particular, the claims represent patentable subject matter and are patentable for at least five reasons:

- 1) because the Examiner has failed to establish a *prima facie* case of non statutory subject matter for the rejected claims,
- 2) because arguments regarding the alleged non statutory subject matter fail to comply with the requirements of the Administrative Procedures Act and are therefore moot,
- 3) because the standard used to evaluate utility and subject matter eligibility is different than the one used for other companies filing similar patents – an apparent violation of 35 USC 3,
- 4) because the claimed invention produces results that are concrete, tangible and useful, and
- 5) because the claimed invention physically transforms transaction data and descriptive data into a complete entity context that is distributed to a plurality of users.

Reason #1 - The first reason the claims are patentable is that the Examiner has failed to establish a *prima facie* case that any of the claims are directed to non-statutory subject matter. As noted in the *Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility*, the burden is on the USPTO to set forth a *prima facie* case of unpatentability *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Along these same lines MPEP 2160.07 states "the examiner has the initial burden of challenging an asserted utility. Only after the examiner has provided evidence showing that one of ordinary skill in the art would reasonably doubt the asserted utility does the burden shift to the applicant to provide rebuttal evidence sufficient to convince one of ordinary skill in the art of the invention's asserted utility. *In re Brana*, 51 F.3d 1560, 1566, 34 USPQ2d 1436, 1441 (Fed. Cir. 1995) (citing *In re Bundy*, 642 F.2d 430, 433, 209 USPQ 48, 51 (CCPA 1981)). In spite of this well known requirement, the Examiner has not presented any evidence that any of the claimed inventions are not concrete, are not tangible and/or are not useful. In fact, the Examiner failed to provide this information after receiving a specific request to do so (see Evidence Appendix page 39). Because of this, the Examiner has

failed to establish a *prima facie* case that could be used to sustain the §101 rejection of claim 28, claim 29, claim 30, claim 31, claim 32, claim 33, claim 34, claim 35 and/or claim 36. The Examiner has also failed to provide any evidence that the cited claims are not limited to a specific application. In summary, the complete absence of evidence leads to the inevitable conclusion that the Examiner has failed to establish a *prima facie* case that would support a §101 rejection for a single claim.

Reason #2 - As stated previously, the second reason the claims are patentable is that the claim rejections are not in compliance with the requirements of the Administrative Procedures Act and are therefore moot. *In Dickinson v. Zurko*, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of U.S.P.T.O. findings of fact are the standards set forth in the Administrative Procedure Act ("APA") at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. The Appellant respectfully submits that as discussed under Reason #1, the Office Action used to support the claim rejections fails to provide even a scintilla of evidence to support the allegations of non utility and a lack of limitation it contains and that as a result it fails to meet the substantial evidence standard. The Appellant respectfully submits that the Office Action used to support the claim rejections also fails to pass the arbitrary and capricious test. Under the arbitrary and capricious test a reviewing court analyzes whether a rational connection exists between the agency's fact findings and its ultimate action, (see *Hyundai Elecs. Indus. Co. v. ITC*, 899 F.2d 1204, 1209, 14 USPQ2d 1396, 1400 (Fed. Cir. 1990)). The Appellant respectfully submits that the claim rejections also fail to pass the arbitrary and capricious test because there is no rational connection between the U.S.P.T.O. fact-findings in Ebling and Meynard (U.S. Patent 6,970,947 and 7,096,299) and the finding that claim 28, claim 29, claim 30, claim 31, claim 32, claim 33, claim 34, claim 35 and/or claim 36 represent non-statutory subject matter. In Ebling and Meynard the U.S.P.T.O. found that disseminating context information was statutory subject matter. Given these findings, it is irrational and unreasonable to state that developing and distributing context information as described in claim 28, claim 30, claim 31, claim 32, claim 33, claim 34, claim 35 and claim 36 is non-statutory. In Pack (U.S. Patent 7,249,342) and Meynard the U.S.P.T.O. found that using context information to complete a specific task (mask writing and waking up a computer) was statutory subject matter. Given these findings and the State Street findings, it is also irrational and unreasonable to assert that using the distributed context information to complete a plurality of specific, useful, underwriting related tasks as described in claim 29 is non-statutory.

Reason #3 – The third reason claim 28, claim 29, claim 30, claim 31, claim 32, claim 33, claim 34, claim 35 and/or claim 36 are patentable is that the standard being used to evaluate subject matter eligibility appears to be different than the one used for similar large company applications – an apparent violation of 35 USC 3. For example, Tamayo (U.S. Patent 6,836,773) was deemed to have utility in spite of the obvious shortcoming that it can not process duplicate web log data. In a similar fashion, the context information disseminated by Ebling (U.S. Patent 6,970,947) is not limited to useful information. By way of contrast, the claims in question are distribute and/or use information about the aspects of entity context with a real world impact on entity behavior. The U.S.P.T.O. has found behavior information and modeling to be useful in several dozen cases.

Reason #4 - The fourth reason claim 28, claim 29, claim 30, claim 31, claim 32, claim 33, claim 34, claim 35 and/or claim 36 are patentable is that the claimed invention is a machine that produces specific results that are concrete, tangible and useful. In particular, the claimed invention produces and distributes a complete context for an entity. As detailed in the specification, the complete context includes the aspects of context that have an impact on the real world behavior of the entity.

Reason #5 - The fifth reason claim 28, claim 29, claim 30, claim 31, claim 32, claim 33, claim 34, claim 35 and/or claim 36 are patentable is that the claimed invention is a machine that transforms transaction data and descriptive data into a different state or thing: a complete context for an entity that is distributed to a plurality of users. As noted in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility "*the Supreme Court noted that one example of a statutory "process" is where the process steps provide a transformation or reduction of an article to a different state or thing* (*Diehr, 450 U.S. at 183, 209 USPQ at 6*). In Alappat, the Court held that "*data, transformed by a machine*" "*to produce a smooth waveform display*" "*constituted a practical application of an abstract idea.*" *State Street, 149 F.3d at 1373.* In Arrhythmia, the Court held "*the transformation of electrocardiograph signals*" "*by a machine*" "*constituted a practical application of an abstract idea.*" *Id.* Likewise, in State Street, the Court held that "*the transformation of data*" "*by a machine*" "*into a final share price, constitutes a practical application of a mathematical algorithm.*" *Id.* Thus, while Diehr involved the transformation of a tangible object - curing synthetic rubber - the Court also regards the transformation of intangible subject matter to similarly be eligible, so long as data represent some real world activity. As discussed previously, the complete context identifies the aspects of context that have a real world impact on the real world behavior of an entity. The Appellant respectfully submits that the fourth and fifth reasons taken together make it clear that the claimed invention passes the data transformation test and that each of the claims describe a machine that supports a practical application with substantial, specific utility and are therefore statutory subject matter.

The claims are also patentable for the 3rd reason advanced under Issue 3.

Issue 2 - Whether the inventions described in claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44 and claim 45 represents patentable subject matter under 35 USC 101?

Claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44 and claim 45 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. More specifically the Examiner states that the "claims involves disjointed concepts and ideas based in the abstract, all of which fail to provide a practical application and is insufficient to establish a real world "tangible" result" and that nothing is specified in the claims that limits the claim to a particular application. These rejections are respectfully traversed in a number of ways. In particular, the claims represent patentable subject matter and are patentable for at least five reasons:

- 1) because the Examiner has failed to establish a *prima facie* case of non statutory subject matter for the rejected claims,
- 2) because arguments regarding the alleged non statutory subject matter fail to comply with the requirements of the Administrative Procedures Act and are therefore moot,

- 3) because the standard used to evaluate utility and subject matter eligibility is different than the one used for other companies filing similar patents – an apparent violation of 35 USC 3,
- 4) because the claimed invention produces results that are concrete, tangible and useful, and
- 5) because the claimed invention physically transforms transaction data and descriptive data into a different state or thing.

Reason # 1 - The first reason the claims are patentable is the failure to establish a *prima facie* case of non statutory subject matter as detailed in reason #1 under issue 1. In particular, claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44 and claim 45 are allowable for the: first reason advanced under Issue 1.

Reason # 2 - The second reason the claims are patentable is that the arguments used to support the claim rejections fail to comply with the requirements of the APA as detailed in reason # 2 under issue 1. In particular, given the findings of Pack (U.S. Patent 7,249,342) and Meynard (U.S. Patent 7,096,299) and State Street, it is irrational and unreasonable to assert that using context information to complete a plurality of specific, useful, underwriting related tasks as described in claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44 and claim 45 is non-statutory.

Reason # 3 - The third reason claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44 and claim 45 are patentable is that the claim rejections each appear to rely on the use of a different standard for evaluating utility of the claimed invention as detailed in reason # 3 under issue #1.

Reason #4 - The fourth reason claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44 and claim 45 are patentable is that the claimed invention is an article of manufacture that produces results that are concrete, tangible and useful. In particular, the claimed invention produces a complete entity context and uses the complete entity context to: complete one or more entity related actions in an optimal manner, identify a valid context space for entity analyses, underwrite one or more entity related securities, display a plurality of performance information for one or more entity function measures, forecast an entity behavior, forecast an entity sustainability and combinations thereof.

Reason # 5 - The fifth reason claim 37, claim 38, claim 39, claim 40, claim 41, claim 42, claim 43, claim 44 and claim 45 are patentable is that the claimed invention is an article of manufacture that transforms transaction data and descriptive data into a different thing a complete entity context. The complete entity context is then combined with other data and transformed into a different state or thing including: an optimal action, a security, a behavior forecast, a sustainability forecast, a valid context space definition and/or a display of performance information in context. As noted in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility “*the Supreme Court noted that one example of a statutory “process” is where the process steps provide a transformation or reduction of an article to a different state or thing (Diehr, 450 U.S. at 183, 209 USPQ at 6).* In Alappat, the Court held that “*data, transformed by a machine*” “*to produce a smooth waveform display*” “*constituted a practical application of an abstract idea.*” State Street,

149 F.3d at 1373. In Arrhythmia, the Court held "*the transformation of electrocardiograph signals*" "*by a machine*" "*constituted a practical application of an abstract idea.*" *Id.* Likewise, in State Street, the Court held that "*the transformation of data*" "*by a machine*" "*into a final share price, constitutes a practical application of a mathematical algorithm.*" *Id.* Thus, while Diehr involved the transformation of a tangible object - curing synthetic rubber - the Court also regards the transformation of intangible subject matter to similarly be eligible, so long as data represent some real world activity. The Appellant respectfully submits that the fourth and fifth reasons taken together make it clear that the claimed invention passes the data transformation test and that each of the claims describe an article of manufacture that supports a practical application with substantial, specific utility and is therefore statutory subject matter.

The claims are also patentable for the 3rd reason advanced under Issue 3.

Issue 3 - Whether the inventions described in claim 46, claim 47, claim 48, claim 49 and/or claim 50 represent patentable subject matter under 35 USC 101?

Claim 46, claim 47, claim 48, claim 49 and claim 50 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. More specifically the Examiner states that the "claims involves disjointed concepts and ideas based in the abstract, all of which fail to provide a practical application and is insufficient to establish a real world "tangible" result" and that nothing is specified in the claims that limits the claim to a particular application. These rejections are respectfully traversed in a number of ways. In particular, the claims represent patentable subject matter and are patentable for at least five reasons:

- 1) because the Examiner has failed to establish a *prima facie* case of non statutory subject matter for the rejected claims,
- 2) because arguments regarding the alleged non statutory subject matter fail to comply with the requirements of the Administrative Procedures Act and are therefore moot,
- 3) because the standard used to evaluate the scope of the claims is different than the one used for other companies filing similar patents – an apparent violation of 35 USC 3,
- 4) because the claimed invention produces results that are concrete, tangible and useful, and
- 5) because the claimed invention physically transforms transaction data and descriptive data into a different state or thing.

Reason #1 - The first reason the claims are patentable is the failure to establish a *prima facie* case of non statutory subject matter as detailed in reason #1 under issue 1. In particular, claim 46, claim 47, claim 48, claim 49 and claim 50 are allowable for the: first reason advanced under Issue 1.

Reason #2 - As stated previously, the second reason the claims are patentable is that the claim rejections are not in compliance with the requirements of the Administrative Procedures Act and are therefore moot. The Appellant respectfully submits that as discussed under Reason #1, the Office Action used to support the claim rejections fails to provide even a scintilla of evidence to support the allegations of non utility and a lack of limitation it contains and that as a result it fails to meet the substantial evidence standard of the APA. The Appellant respectfully submits that the

Office Action used to support the claim rejections also fails to pass the arbitrary and capricious test, because there is no rational connection between the U.S.P.T.O. fact-findings in Bachman and Taylor (U.S. Patent 7,216,121 and 7,219,073) and the finding that claim 46, claim 47, claim 48, claim 49 and claim 50 represent non-statutory subject matter. In Bachman and Taylor the U.S.P.T.O. found that using context information to support the identification of search results was statutory subject matter. Given these findings, it is irrational and unreasonable to state that developing and using context information to identify specific search results, as described in claim 46, claim 47, claim 48, claim 49 and claim 50, is non-statutory.

Reason #3 – The third reason claim 46, claim 47, claim 48, claim 49 and claim 50 are patentable is that the standard being used to evaluate the scope of the claims appears to be different than the one used for similar large company applications – an apparent violation of 35 USC 3. For example, Bachman (U.S. Patent 7,216,121) was deemed to have claims of reasonable scope in spite of the fact that the primary claim includes a broad statement “a context within which said search query is to be searched” that does not appear to have any limitations. By way of contrast, the claimed invention identifies search results that are relevant to a specific entity context where the entity context is defined by one or more function measures and the aspects of context that have an impact on entity function measure performance. The claim rejections clearly rely on the use of a different standard.

Reason #4 - The fourth reason claim 46, claim 47, claim 48, claim 49 and claim 50 are patentable is that the claimed invention is a process that produces results that are concrete, tangible and useful. In particular, the claimed invention identifies and displays specific search results that are relevant to a specific entity context.

Reason #5 - The fifth reason claim 46, claim 47, claim 48, claim 49 and claim 50 are allowable is that the claimed invention is a process that transforms transaction data and descriptive data into a different state or thing; search results that are relevant to a specific entity context. As noted in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility “the Supreme Court noted that one example of a statutory “process” is where the process steps provide a transformation or reduction of an article to a different state or thing (Diehr, 450 U.S. at 183, 209 USPQ at 6). In Alappat, the Court held that “*data, transformed by a machine*” “to produce a smooth waveform display” “constituted a practical application of an abstract idea.” State Street, 149 F.3d at 1373. In Arrhythmia, the Court held “*the transformation of electrocardiograph signals*” “by a machine” “constituted a practical application of an abstract idea.” *Id.* Likewise, in State Street, the Court held that “*the transformation of data*” “by a machine” “into a final share price, constitutes a practical application of a mathematical algorithm.” *Id.* Thus, while Diehr involved the transformation of a tangible object - curing synthetic rubber - the Court also regards the transformation of intangible subject matter to similarly be eligible, so long as data represent some real world activity. The Appellant respectfully submits that the fourth and fifth reasons taken together make it clear that the claimed invention passes the data transformation test and that each of the claims describe a process that supports a practical application with substantial, specific utility and is therefore statutory subject matter.

The claims are also patentable for the 3rd reason advanced under Issue 1.

Issue 4 - Whether the inventions described in claim 51, claim 52 and/or claim 53 represent patentable subject matter under 35 USC 101?

Claim 51, claim 52 and claim 53 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. More specifically the Examiner states that the "claims involves disjointed concepts and ideas based in the abstract, all of which fail to provide a practical application and is insufficient to establish a real world "tangible" result" and that nothing is specified in the claims that limits the claim to a particular application. These rejections are respectfully traversed in a number of ways. In particular, the claims represent patentable subject matter and are patentable for at least five reasons:

- 1) because the Examiner has failed to establish a *prima facie* case of non statutory subject matter for the rejected claims,
- 2) because arguments regarding the alleged non statutory subject matter fail to comply with the requirements of the Administrative Procedures Act and are therefore moot,
- 3) because the standard used to evaluate utility and subject matter eligibility is different than the one used for other companies filing similar patents – an apparent violation of 35 USC 3,
- 4) because the claimed invention produces results that are concrete, tangible and useful, and
- 5) because the claimed invention physically transforms transaction data and descriptive data into a different state or thing.

Reason # 1 - The first reason the claims are patentable is the failure to establish a *prima facie* case of non statutory subject matter as detailed in reason #1 under issue 1. In particular, claim 51, claim 52 and claim 53 are allowable for the: first reason advanced under Issue 1.

Reason # 2 - The second reason the claims are patentable is that the arguments used to support the claim rejections fail to comply with the requirements of the APA as detailed in reason # 2 under issue 1. In particular, given the findings of Ebling (U.S. Patent 6,970,947) and Meynard (U.S. Patent 7,096,299), it is irrational and unreasonable to assert that distributing entity context information as described in claim 51, claim 52 and claim 53 is non-statutory.

Reason # 3 - The third reason claim 51, claim 52 and claim 53 are patentable is that the claim rejections each appear to rely on the use of a different standard for evaluating utility of the claimed invention as detailed in reason # 3 under issue #1.

Reason # 4 - The fourth reason claim 51, claim 52 and claim 53 are allowable is that the claimed invention is an article of manufacture that produces results that are concrete, tangible and useful. In particular, the claimed invention produces and distributes a context for an entity. As detailed in the specification, the context includes the aspects of context that have an impact on the real world behavior.

Reason # 5 - The fifth reason claim 51, claim 52 and claim 53 are patentable is that the claimed invention is an article of manufacture that transforms transaction data and descriptive data into a different state or thing: a context for an entity that is distributed to a plurality of users. As noted in

the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility “*the Supreme Court noted that one example of a statutory “process” is where the process steps provide a transformation or reduction of an article to a different state or thing* (*Diehr*, 450 U.S. at 183, 209 USPQ at 6). In *Alappat*, the Court held that “*data, transformed by a machine*” “*to produce a smooth waveform display*” “*constituted a practical application of an abstract idea.*” *State Street*, 149 F.3d at 1373. In *Arrhythmia*, the Court held “*the transformation of electrocardiograph signals*” “*by a machine*” “*constituted a practical application of an abstract idea.*” *Id.* Likewise, in *State Street*, the Court held that “*the transformation of data*” “*by a machine*” “*into a final share price, constitutes a practical application of a mathematical algorithm.*” *Id.* Thus, while *Diehr* involved the transformation of a tangible object - curing synthetic rubber - the Court also regards the transformation of intangible subject matter to similarly be eligible, so long as data represent some real world activity. As discussed previously, the complete context identifies the aspects of context that have a real world impact on the real world behavior of an entity. The Appellant respectfully submits that the fourth and fifth reasons taken together make it clear that the claimed invention passes the data transformation test and that each of the claims describe an article of manufacture that supports a practical application with substantial, specific utility and are therefore statutory subject matter.

The claims are also patentable for the 3rd reason advanced under Issue 3.

Issue 5 - Whether the inventions described in claim 54, claim 55, claim 56, claim 57, claim 58 and/or claim 59 represent patentable subject matter under 35 USC 101?

Claim 54, claim 55, claim 56, claim 57, claim 58 and claim 59 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. More specifically the Examiner states that the “claims involves disjointed concepts and ideas based in the abstract, all of which fail to provide a practical application and is insufficient to establish a real world “tangible” result” and that nothing is specified in the claims that limits the claim to a particular application. These rejections are respectfully traversed in a number of ways. In particular, the claims represent patentable subject matter and are patentable for at least five reasons:

- 1) because the Examiner has failed to establish a *prima facie* case of non statutory subject matter for the rejected claims,
- 2) because arguments regarding the alleged non statutory subject matter fail to comply with the requirements of the Administrative Procedures Act and are therefore moot,
- 3) because the standard used to evaluate the scope of the claims is different than the one used for other companies filing similar patents – an apparent violation of 35 USC 3,
- 4) because the claimed invention produces results that are concrete, tangible and useful, and
- 5) because the claimed invention physically transforms transaction data and descriptive data into a different state or thing.

Reason # 1 - The first reason the claims are patentable is the failure to establish a *prima facie* case of non statutory subject matter as detailed in reason #1 under issue 1. In particular, claim 54,

claim 55, claim 56, claim 57, claim 58 and claim 59 are allowable for the: first reason advanced under Issue 1.

Reason # 2 - The second reason the claims are patentable is that the arguments used to support the claim rejections fail to comply with the requirements of the APA as detailed in reason # 2 under issue 3. In particular, given the findings of Bachman and Taylor (U.S. Patent 7,216,121 and 7,219,073), it is irrational and unreasonable to assert that using a context to identify specific search results as described in claim 54, claim 55, claim 56, claim 57, claim 58 and claim 59 is non-statutory.

Reason # 3 - The third reason claim 54, claim 55, claim 56, claim 57, claim 58 and claim 59 are patentable is that the claim rejections each appear to rely on the use of a different standard for evaluating the scope of the pending claims as detailed in reason # 3 under issue #3.

Reason # 4 - The fourth reason claim 54, claim 55, claim 56, claim 57, claim 58 and claim 59 are patentable is that the claimed invention is a process that produces results that are concrete, tangible and useful. In particular, the claimed invention identifies and displays specific search results that are relevant to a specific entity context.

Reason # 5 - The fifth reason claim 54, claim 55, claim 56, claim 57, claim 58 and claim 59 are allowable is that the claimed invention is a process that transforms transaction data and descriptive data into a different state or thing; search results that are relevant to a specific entity context. As noted in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility "the Supreme Court noted that one example of a statutory "process" is where the process steps provide a transformation or reduction of an article to a different state or thing (Diehr, 450 U.S. at 183, 209 USPQ at 6). In Alappat, the Court held that "*data, transformed by a machine*" "*to produce a smooth waveform display*" "*constituted a practical application of an abstract idea.*" *State Street, 149 F.3d at 1373.* In Arrhythmia, the Court held "*the transformation of electrocardiograph signals*" "*by a machine*" "*constituted a practical application of an abstract idea.*" *Id.* Likewise, in State Street, the Court held that "*the transformation of data*" "*by a machine*" "*into a final share price, constitutes a practical application of a mathematical algorithm.*" *Id.* Thus, while Diehr involved the transformation of a tangible object - curing synthetic rubber - the Court also regards the transformation of intangible subject matter to similarly be eligible, so long as data represent some real world activity. The Appellant respectfully submits that the fourth and fifth reasons taken together make it clear that the claimed invention passes the data transformation test and that each of the claims describe a process that supports a practical application with substantial, specific utility and is therefore statutory subject matter.

The claims are also patentable for the 3rd reason advanced under Issue 1.

Issue 6 - Whether the inventions described in claim 60, claim 61, claim 62, claim 63, claim 64 and/or claim 65 represent patentable subject matter under 35 USC 101?

Claim 60, claim 61, claim 62, claim 63, claim 64 and claim 65 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. More specifically the Examiner states that the "claims involves disjointed concepts and ideas based in the abstract, all of which fail to provide a practical application and is insufficient to establish a real world "tangible" result" and that nothing is

specified in the claims that limits the claim to a particular application. These rejections are respectfully traversed in a number of ways. In particular, the claims represent patentable subject matter and are patentable for at least five reasons:

- 1) because the Examiner has failed to establish a prima facie case of non statutory subject matter for the rejected claims,
- 2) because arguments regarding the alleged non statutory subject matter fail to comply with the requirements of the Administrative Procedures Act and are therefore moot,
- 3) because the standard used to evaluate the scope of the claims is different than the one used for other companies filing similar patents – an apparent violation of 35 USC 3,
- 4) because the claimed invention produces results that are concrete, tangible and useful, and
- 5) because the claimed invention physically transforms transaction data and descriptive data into a different state or thing.

Reason # 1 - The first reason the claims are patentable is the failure to establish a prima facie case of non statutory subject matter as detailed in reason #1 under issue 1. In particular, claim 60, claim 61, claim 62, claim 63, claim 64 and claim 65 are allowable for the: first reason advanced under Issue 1.

Reason # 2 - The second reason the claims are patentable is that the arguments used to support the claim rejections fail to comply with the requirements of the APA as detailed in reason # 2 under issue 3. In particular, given the findings of Bachman and Taylor (U.S. Patent 7,216,121 and 7,219,073), it is irrational and unreasonable to assert that using a context to identify specific search results as described in claim 60, claim 61, claim 62, claim 63, claim 64 and claim 65 is non-statutory.

Reason # 3 - The third reason claim 60, claim 61, claim 62, claim 63, claim 64 and claim 65 are patentable is that the claim rejections each appear to rely on the use of a different standard for evaluating the scope of the pending claims as detailed in reason # 3 under issue #3.

Reason # 4 - The fourth reason claim 60, claim 61, claim 62, claim 63, claim 64 and claim 65 are patentable is that the claimed invention is an article of manufacture that produces results that are concrete, tangible and useful. In particular, the claimed invention identifies and displays specific search results that are relevant to a specific entity context.

Reason # 5 - The fifth reason claim 60, claim 61, claim 62, claim 63, claim 64 and claim 65 are allowable is that the claimed invention is an article of manufacture that transforms transaction data and descriptive data into a different state or thing: search results that are relevant to a specific entity context. As noted in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility "the Supreme Court noted that one example of a statutory "process" is where the process steps provide a transformation or reduction of an article to a different state or thing (Diehr, 450 U.S. at 183, 209 USPQ at 6). In Alappat, the Court held that "data, transformed by a machine" "to produce a smooth waveform display" "constituted a practical application of an abstract idea." State Street, 149 F.3d at 1373. In Arrhythmia, the Court held "the transformation of

electrocardiograph signals" "by a machine" "constituted a practical application of an abstract idea."

Id. Likewise, in State Street, the Court held that "*the transformation of data*" "by a machine" "into a final share price, constitutes a practical application of a mathematical algorithm." *Id.* Thus, while Diehr involved the transformation of a tangible object - curing synthetic rubber - the Court also regards the transformation of intangible subject matter to similarly be eligible, so long as data represent some real world activity. The Appellant respectfully submits that the fourth and fifth reasons taken together make it clear that the claimed invention passes the data transformation test and that each of the claims describe an article of manufacture that supports a practical application with substantial, specific utility and is therefore statutory subject matter.

The claims are also patentable for the 3rd reason advanced under Issue 1.

Issue 7 - Whether the inventions described in claim 66, claim 67, claim 68 and/or claim 69 represent patentable subject matter under 35 USC 101?

Claim 66, claim 67, claim 68 and claim 69 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. More specifically the Examiner states that the "claims involves disjointed concepts and ideas based in the abstract, all of which fail to provide a practical application and is insufficient to establish a real world "tangible" result" and that nothing is specified in the claims that limits the claim to a particular application. These rejections are respectfully traversed in a number of ways. In particular, the claims represent patentable subject matter and are patentable for at least five reasons:

- 1) because the Examiner has failed to establish a *prima facie* case of non statutory subject matter for the rejected claims,
- 2) because arguments regarding the alleged non statutory subject matter fail to comply with the requirements of the Administrative Procedures Act and are therefore moot,
- 3) because the standard used to evaluate the scope of the claims is different than the one used for other companies filing similar patents – an apparent violation of 35 USC 3,
- 4) because the claimed invention produces results that are concrete, tangible and useful, and
- 5) because the claimed invention physically transforms transaction data and descriptive data into a different state or thing.

Reason #1 - The first reason the claims are patentable is the failure to establish a *prima facie* case of non statutory subject matter as detailed in reason #1 under issue 1. In particular, claim 66, claim 67, claim 68 and claim 69 are allowable for the: first reason advanced under Issue 1.

Reason #2 - The second reason the claims are patentable is that the arguments used to support the claim rejections fail to comply with the requirements of the APA as detailed in reason #2 under issue 3. In particular, given the findings of Bachman and Taylor (U.S. Patent 7,216,121 and 7,219,073), it is irrational and unreasonable to assert that using a context to identify specific search results as described in claim 66, claim 67, claim 68 and claim 69 is non-statutory.

Reason # 3 - The third reason claim 66, claim 67, claim 68 and claim 69 are patentable is that the claim rejections each appear to rely on the use of a different standard for evaluating the scope of the pending claims as detailed in reason # 3 under issue #3.

Reason # 4 - The fourth reason claim 66, claim 67, claim 68 and claim 69 are patentable is that the claimed invention is a machine that produces results that are concrete, tangible and useful. In particular, the claimed invention identifies and displays specific search results that are relevant to a specific entity context.

Reason # 5 - The fifth reason claim 66, claim 67, claim 68 and claim 69 are allowable is that the claimed invention is a machine that transforms transaction data and descriptive data into a different state or thing; search results that are relevant to a specific entity context. As noted in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility "the Supreme Court noted that one example of a statutory "process" is where the process steps provide a transformation or reduction of an article to a different state or thing (Diehr, 450 U.S. at 183, 209 USPQ at 6). In Alappat, the Court held that "*data, transformed by a machine*" "*to produce a smooth waveform display*" "*constituted a practical application of an abstract idea.*" *State Street, 149 F.3d at 1373.* In Arrhythmia, the Court held "*the transformation of electrocardiograph signals*" "*by a machine*" "*constituted a practical application of an abstract idea.*" *Id.* Likewise, in State Street, the Court held that "*the transformation of data*" "*by a machine*" "*into a final share price, constitutes a practical application of a mathematical algorithm.*" *Id.* Thus, while Diehr involved the transformation of a tangible object - curing synthetic rubber - the Court also regards the transformation of intangible subject matter to similarly be eligible, so long as data represent some real world activity. The Appellant respectfully submits that the fourth and fifth reasons taken together make it clear that the claimed invention passes the data transformation test and that each of the claims describe a machine that supports a practical application with substantial, specific utility and is therefore statutory subject matter.

The claims are also patentable for the 3rd reason advanced under Issue 1.

Issue 8 - Whether the invention described in claim 70 represents patentable subject matter under 35 USC 101?

Reasons 1 and 2 – Claim 70 is patentable in view of the shortcomings in the arguments that were detailed in issue 1 and the usefulness of the results produced by the claimed invention. In particular, claim 70 is allowable for the: first and third reasons advanced under Issue 1.

Reason # 3 - The third reason claim 70 is patentable is that the arguments used to support the claim rejection fail to comply with the requirements of the APA as detailed in reason # 2 under issue 2. In particular, given the findings of Battenfelder (U.S. Patent 7,260,498) and Meynard (U.S. Patent 7,096,299), it is irrational and unreasonable to assert that using complete entity context information (which has been equated with knowledge in the specification) to complete a plurality of specific, useful tasks that provide context specific electronic performance support as described in claim 70 is non-statutory.

Reason #4 - The fourth reason claim 70 is patentable is that the claimed invention is a process that produces results that are concrete, tangible and useful. In particular, the claimed invention produces entity knowledge and uses the entity knowledge to provide electronic performance support by: identifying the data, information and knowledge that is most relevant to the entity, identifying entity preferences, loading the data and information that is most relevant to the entity into a cache, optimizing information technology support of entity performance, providing a true natural language interface for entity related software and combinations thereof.

Reason # 5 - The fifth reason claim 70 is patentable is that the claimed invention is a process that transforms transaction data and descriptive data into a different state or thing: an entity knowledge. The entity knowledge is then combined with other data and transformed into a different state or thing that provides context specific electronic performance support including: data, information and knowledge that is most relevant to the entity, a cache containing said data, information and knowledge, entity preferences, optimized information technology support of entity performance, a true natural language interface for entity related software and combinations thereof. As noted in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility "*the Supreme Court noted that one example of a statutory "process" is where the process steps provide a transformation or reduction of an article to a different state or thing* (*Diehr*, 450 U.S. at 183, 209 USPQ at 6). In *Alappat*, the Court held that "data, transformed by a machine" "to produce a smooth waveform display" "constituted a practical application of an abstract idea." *State Street*, 149 F.3d at 1373. In *Arrhythmia*, the Court held "*the transformation of electrocardiograph signals*" "by a machine" "constituted a practical application of an abstract idea." *Id.* Likewise, in *State Street*, the Court held that "*the transformation of data*" "by a machine" "into a final share price, constitutes a practical application of a mathematical algorithm." *Id.* Thus, while *Diehr* involved the transformation of a tangible object - curing synthetic rubber - the Court also regards the transformation of intangible subject matter to similarly be eligible, so long as data represent some real world activity. The Appellant respectfully submits that the fourth and fifth reasons taken together make it clear that the claimed invention passes the data transformation test and that each of the claims describe a process that supports a practical application with substantial, specific utility and is therefore statutory subject matter. The claims are also patentable for the 3rd reason advanced under Issue 3.

Conclusion

For the extensive reasons advanced above, Appellant respectfully but forcefully contends that each claim is patentable. The Appellant also takes note of the fact that the stated basis for the claim rejections runs counter to the U.S.P.T.O. position expressed in regards to *In re Comiskey*, No. 2006-1286. Therefore, reversal of all rejections is courteously solicited.

Respectfully submitted,

/B.J. Bennett/

B.J. Bennett, President Asset Trust, Inc.

Dated: December 2, 2007

CLAIMS APPENDIX

28. An entity context apparatus, comprising:

a plurality of entity related systems and databases,

means for preparing data from said systems and databases for use in processing,

means for developing a complete entity context using at least a portion of said data,

means for data and information storage, and

means for complete entity context distribution

where a complete entity context identifies each of the one or more aspects of a context that have a tangible effect on a behavior of an entity,

where an enterprise entity has two or more entity function measures, and

where a complete entity context includes different aspects of context selected from the group consisting element context, resource context, factor context, reference context, measure context, relationship context, transaction context, lexical context, temporal context and combinations thereof.

29. The apparatus of claim 28 that further comprises means for applying all or part of a complete entity context to support useful activities selected from the group consisting of completing one or more entity related actions in an optimal manner, identifying a valid context space for entity analyses, underwriting one or more entity related securities, displaying a plurality of entity related information, forecasting an entity behavior, forecasting an entity sustainability and combinations thereof.

30. The apparatus of claim 28 where an entity is selected from a group of domains consisting of political, habitat, intangibles, interpersonal, market, organization, biology, cellular, organism, protein, chemistry, geology, physics, space, tangible goods, water, weather and combinations thereof.

31. The apparatus of claim 28 where an entity is a separate entity, a combination of two or more entities or a multi-entity system.

32. The apparatus of claim 28 where an entity is a member of one or more groups selected from the group consisting of voter, precinct, caucus, city, county, state/province, regional, national, multi-national, global, household, neighborhood, community, city, region, brand, expectations, ideas, ideology, knowledge, law, money, right, relationship, service, individual, nuclear family,

extended family, clan, ethnic group, organization, multi-organization, industry, market, economy, team, group, department, division, company, organization species, genus, family, order, class, phylum, kingdom, macromolecular complexes, protein, rna, dna, x-ylation, organelles, cells, structures, organs, organic systems, organism, monomer, dimer, large oligomer, aggregate, particle, molecules, compounds, chemicals, catalysts, minerals, sediment, rock, landform, plate, continent, planet, quark, particle zoo, protons, neutrons, electrons, atoms, molecules, dark matter, asteroids, comets, planets, stars, solar system, galaxy, universe, compounds, minerals, components, subassemblies, assemblies, subsystems, goods, systems pond, lake, bay, sea, ocean, creek, stream, river, current, atmosphere, clouds, lightning, precipitation, storm, wind and combinations thereof.

33. The apparatus of claim 28 where preparing data for use in processing further comprises:
developing a common entity specific configuration for organizing data selected from the group consisting of schema, ontology and combinations thereof, and
converting data to a common entity specific schema and storing said data in accordance with said schema, converting data to a common entity specific ontology and storing said data in accordance with said ontology or a combination thereof.
34. The apparatus of claim 28 where data are aggregated from the group of consisting of organization systems, personal systems, bio medical systems, scientific systems, devices and combinations thereof.
35. The apparatus of claim 28 that is supported by computer hardware from the group consisting of a computer, a cluster, a plurality of computers connected via a network, one or more virtual computers, one or more blade servers, a plurality of computers connected via a grid, a device and combinations thereof.
36. The apparatus of claim 28 that further comprises support for context development, context storage and context distribution for a collection of entities or a population of entities.
37. A computer readable medium having sequences of instructions stored therein, which when executed directs at least one computer to perform the steps in an entity context method, comprising:
aggregating data from a plurality of entity related systems,

developing a complete entity context using at least a portion of said data where a complete entity context includes one or more different aspects of context selected from the group consisting element context, resource context, factor context, reference context, measure context, relationship context, transaction context, lexical context and combinations thereof and where a complete entity context identifies each of the one or more aspects of a context that have a tangible influence on a behavior of an entity, where an enterprise entity has two or more entity function measures, and

using a complete entity context to support useful activities selected from the group consisting of completing one or more entity related actions in an optimal manner, identifying a valid context space for entity analyses, underwriting one or more entity related securities, displaying a plurality of performance information for one or more entity function measures, forecasting an entity behavior, forecasting an entity sustainability and combinations thereof

where developing a complete entity context further comprises quantifying an impact of one or more other entities on each of one or more aspects of said complete context.

38. The computer readable medium of claim 37 where each of one or more aspects of context are developed in an automated fashion by learning from the data.

39. The computer readable medium of claim 37, wherein each of one or more entity function measures further comprise a measure selected from the group consisting of a temporal measure, a transaction measure, a financial measure, a physical measure, a satisfaction measure and combinations thereof.

40. The computer readable medium of claim 37 where an entity is a separate entity, a collaboration between two or more entities or a multi-entity system.

41. The computer readable medium of claim 37 where an entity is a member of one or more groups selected from the group consisting of voter, precinct, caucus, city, county, state/province, regional, national, multi-national, global, household, neighborhood, community, city, region, brand, expectations, ideas, ideology, knowledge, law, money, right, relationship, service, individual, nuclear family, extended family, clan, ethnic group, organization, multi-organization, industry, market, economy, team, group, department, division, company, organization species, genus, family, order, class, phylum, kingdom, macromolecular complexes, protein, rna, dna, x-ylation, organelles, cells, structures, organs, organic systems, organism, monomer, dimer, large oligomer,

aggregate, particle, molecules, compounds, chemicals, catalysts, minerals, sediment, rock, landform, plate, continent, planet, quark, particle zoo, protons, neutrons, electrons, atoms, molecules, dark matter, asteroids, comets, planets, stars, solar system, galaxy, universe, compounds, minerals, components, subassemblies, assemblies, subsystems, goods, systems pond, lake, bay, sea, ocean, creek, stream, river, current, atmosphere, clouds, lightning, precipitation, storm, wind and combinations thereof.

42. The computer readable medium of claim 37 where a complete entity context is developed by a series of models selected from the group consisting of neural network; regression, generalized additive; support vector method, entropy minimization, generalized autoregressive conditional heteroskedasticity, wavelets, Markov, Viterbi, relevance vector method, Ornstein - Uhlenbeck, Bayesian, kriging, multivalent, multivariate adaptive regression splines, swarm, probabilistic – relational, power law, fractal, data envelopment analysis, path analysis and combinations thereof.
43. The computer readable medium of claim 37 where a complete entity context includes attributes from the group consisting of the definition of one or more entity functions, the relative importance of the one or more entity functions, one or more entity function measures, the identity and description of current, past and future entity actions, the identity and description of elements that support the completion of entity actions, the identity and description of resources consumed during the completion of entity actions, the identity and description of environmental factors that affect the completion of entity actions, the interrelationship between elements, factors and resources, the relationship between elements, factors, resources, entity actions and entity function measure performance and combinations thereof.
44. The computer readable medium of claim 37 where a complete entity context is developed in an automated fashion by learning from the data.
45. The computer readable medium of claim 37 where the method further comprises identifying a valid context space for each entity context.

46. A search method comprising:

aggregating data from a plurality of entity related systems,
develop one or more entity contexts for an individual entity and for a group of individual entities using at least a portion of said data,

identifying a combination of data and information that is relevant to one or more layers of context for an entity selected from the group consisting of the individual entity, the group entity and combinations thereof using said entity contexts, and
displaying the results in order of relevance

where an entity context further comprises a relationship context layer and a plurality of context layers selected from the group consisting an element context layer, a resource context layer, a factor context layer, a reference context layer, a measure context layer, a transaction context layer, a lexical context layer and combinations thereof, and

where an entity context identifies one or more aspects of a context that have a tangible effect on a behavior of an entity.

47. The method of claim 46 that further comprises:

completing a transaction in an automated fashion where a price for said transaction is a function of an entity context.

48. The method of claim 46 wherein a measure context layer provides information that supports an identification of data and information relevance that is a function of its value to an entity.

49. The method of claim 46 wherein each entity context layer of a plurality of context layers is developed in automated fashion by learning from the data.

50. The method of claim 46 that has a context quotient of 200.

51. A computer readable medium having sequences of instructions stored therein, which when executed directs at least one computer to perform the steps in a context distribution method, comprising:

aggregate data from a plurality of entity related systems,

develop one or more entity contexts using at least a portion of said data where an entity context includes a reference context and one or more different aspects of context selected from the group consisting element context, resource context, factor context, measure context, relationship context, transaction context, lexical context and combinations thereof, and

distribute one or more of the entity contexts in an automated fashion

where an entity context identifies one or more aspects of a context that have a tangible

influence on a behavior of an entity,

where an entity context further comprises a quantified impact of one or more other entities on one or more aspects of said entity context, and

where the computer readable medium further comprises a plurality of intelligent agents.

52. The computer readable medium of claim 51 that supports distribution methods selected from the group consisting of device synchronization, device synchronization and replication, packet distribution, natural language interface and combinations thereof.

53. The computer readable medium of claim 51 that distributes one or more aspects of context in one or more separate layers where said layers further comprise operating system layers, middleware layers or web service capabilities.

54. A context search method, comprising

Aggregating data related to an entity in accordance with a common schema,

Analyzing at least a portion of said data as required to identify an entity context and one or more priorities for said entity given said context,

Identifying data, information and knowledge that is relevant to said entity context, and

Presenting at least one of relevant data, relevant information or relevant knowledge after sorting said data, information or knowledge on the basis of entity context relevancy and priorities

where an entity context identifies one or more aspects of a context that have a tangible impact on a behavior of an entity, and

where data related to an entity are obtained from a world wide web and the group consisting of a plurality of entity related narrow system databases, one or more external databases, an intranet, a direct input and combinations thereof.

55. The method of claim 54, wherein an entity context further comprises an element context and one or more aspects of context selected from the group consisting of resource context, factor context, reference context, measure context, relationship context, transaction context, lexical context, temporal context and combinations thereof

where a reference context further comprises information that defines a relationship of one or more aspects of context selected from the group consisting element context, resource context, factor context, measure context, relationship context, transaction context and combinations thereof to one or more coordinate systems over time.

56. The method of claim 54, wherein one or more priorities are defined by one or more mission measures.

57. The method of claim 56, wherein one or more mission measures further comprise any quantifiable measure.

58. The method of claim 56, wherein one or more mission measures further comprise measures selected from the group consisting of a temporal measure, a transaction measure, a financial measure, a physical measure, a satisfaction measure and combinations thereof.

59. The method of claim 54, wherein an entity context is developed by learning from the data.

60. A program storage device readable by a computer, tangibly embodying a program of instructions executable by at least one computer to perform the steps in a context search method, comprising:

Aggregating data related to an entity in accordance with a common schema,

Analyzing at least a portion of said data as required to identify an entity context and one or more priorities for said entity given said context,

Identifying data, information and knowledge that is relevant to said entity context, and

Presenting at least one of relevant data, relevant information or relevant knowledge after sorting said data, information or knowledge on the basis of entity context relevancy and priorities

where an entity context identifies one or more aspects of a context that have a tangible effect on a behavior of an entity,

where identifying an entity context further comprises quantifying an impact of one or more other entities on each of one or more aspects of said context; and

where an entity context further comprises a measure context and one or more aspects of context selected from the group consisting of resource context, factor context, element context, reference context, relationship context, transaction context, lexical context, temporal context and combinations thereof.

61. The program storage device of claim 60, wherein one or more priorities are defined by one or more mission measures.

62. The program storage device of claim 61, wherein one or more mission measures further comprise any quantifiable measure selected from the group consisting of a transaction measure, a financial measure, a physical measure, a satisfaction measure and combinations thereof.

63. The program storage device of claim 60, wherein data related to an entity are obtained from the group consisting of a plurality of entity related narrow system databases, one or more external databases, a world wide web, a direct input and combinations thereof.

64. The program storage device of claim 60, wherein one or more priorities for an entity are identified in an automated manner by learning from the data.

65. The program storage device of claim 60, wherein an entity is selected from a group of domains consisting of political, habitat, intangibles, interpersonal, market, organization, biology, cellular, organism, protein, chemistry, geology, physics, space, tangible goods, water, weather and combinations thereof.

66. A context search system comprising:

networked computers each with a processor having circuitry to execute instructions; a storage device available to each processor with sequences of instructions stored therein, which when executed cause the processors to:

- (a) aggregate data related to an entity in format suitable for processing,
- (b) analyze at least a portion of said data as required to identify an entity context and one or more priorities for said entity given said context,
- (c) identify data, information and knowledge that is relevant to said entity context, and
- (d) presenting at least one of relevant data, relevant information or relevant knowledge after it is sorted on the basis of entity context relevancy and priorities

where an entity context identifies each of the one or more aspects of a context that have a tangible impact on a behavior of an entity,

where one or more priorities for the entity are identified by said entity, and

where an entity context further comprises a factor context and one or more aspects of context selected from the group consisting of measure context, resource context, reference context, element context, relationship context, transaction context, lexical context, temporal context and combinations thereof where a measure context further identifies and quantifies

an impact of actions, events, elements, factors and resources on each of a plurality of entity function measures by time period.

67. The system of claim 66, wherein one or more priorities are defined by one or more entity function measures where said function measures further comprise a temporal measure and one or more measures selected from the group consisting of a transaction measure, a financial measure, a physical measure, a satisfaction measure and combinations thereof.

68. The system of claim 66, wherein identifying data, information or knowledge that is relevant to an entity context further comprises the development of one or more indices for a measure context and for aspects of context selected from the group consisting of element context, factor context, reference context, relationship context, transaction context, lexical context, temporal context, resource context and combinations thereof.

69. The program storage device of claim 60, wherein data related to an entity are obtained from the group consisting of a one or more entity related narrow system databases, one or more external databases, a world wide web, a direct input and combinations thereof.

70. An entity knowledge method, comprising

Preparing a plurality of entity related data for use in processing,

Analyzing at least a portion of said data as required to develop an entity knowledge, and

Using said knowledge to complete useful activities selected from the group consisting of identifying the data, information and knowledge that is most relevant to the entity, identifying entity preferences, loading the data and information that is most relevant to the entity into a cache, optimize information technology support of entity performance, providing a true natural language interface for entity related software and combinations thereof where an entity knowledge further comprises a model of entity behavior that supports the identification of an optimal set of actions for a given context.

Evidence Appendix

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Excerpt from Amendment/Reply submitted December 9, 2006

Request for affidavits under 37 C.F.R. 1.104

The 1 December 2006 Office Action appears to be based entirely on opinion(s) that are based on facts in the personal knowledge of one or more employees of the Office. 37 C.F.R. 1.104 provides that:

When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.

Accordingly, the Assignee requests that an affidavit detailing the facts within the personal knowledge of any employee(s) of the Office that were used to support the statement that the claims involve disjointed concepts and ideas based in the abstract, all of which fails to provide a practical application and is insufficient to establish a real world "tangible" result. The Assignee further requests that affidavits detailing the facts within the personal knowledge of any employee(s) of the Office that support:

- a) an implicit opinion that a complete context has no practical utility, is not concrete, is not tangible and/or is not useful,
- b) an implicit opinion that transforming data into a model of complete context is not statutory subject matter, and
- c) an implicit opinion that using a complete context to facilitate and optimize any aspect of the development, discovery and/or delivery of useful data, goods, information, knowledge and/or services has no practical utility, is not concrete, is not tangible and/or is not useful

be provided on or before the date of the next Office Action. These affidavits are required for inclusion in the appeal that will be filed if the pending claims are not granted.

Related Proceedings Appendix

None